

Faculty of Medicine

BIMM80, Biomedicine: Research Project in Life Science Industry, 45 credits

Biomedicin: Forskningsprojekt inom Life Science industri, 45 högskolepoäng Second Cycle / Avancerad nivå

Details of approval

The syllabus is an old version, approved by The Master's Programmes Board on 2021-03-16 and was valid from 2021-03-24 , autumn semester 2021.

General Information

The course is compulsory in the industrial research path in the *specialisation in industrial biomedical research* and is included in semester 3 and 4 of the Master's Programme in Biomedicine.

Main field of studies	Depth of study relative to the degree requirements
Biomedicine	A2E, Second cycle, contains degree project for Master of Arts/Master of Science (120 credits)

Learning outcomes

Knowledge and understanding

On completion of the course, the students shall be able to:

- give an account of drug development and/or the different parts of product development using correct terminology and explain the terminology relating to to the specialisation of the project
- give an account of the requirements and skills relevant for an individual professional in applied work in biomedicine

Competence and skills

On completion of the course, the students shall be able to:

- plan a project in consultation with a supervisor and summarise this in writing
- participate in teamwork with different professionals in the biomedical subject area
- document completed work according to the specific instructions given by the organisation and carry out a handover at the end of the project work
- write an introductory chapter to the subject area
- present their own results in writing and critically assess and evaluate these in relation to the preconditions of the project and others' research results
- present the results and conclusions of the project orally at a critical review and discuss the content of the research manuscript with an appointed expert critical reviewer and student critical reviewer, and publicly discuss and examine another project.

Judgement and approach

On completion of the course, the students shall be able to:

- evaluate and justify the importance of the biomedical project for continued research, societal benefit or as a basis for a decision-making
- reflect on their own results in relation to current knowledge and the different phases of drug development
- reflect on ethical issues in the project and discuss alternatives and consequences related to these based on ethical principles and guidelines
- reflect on their role in the project and how collaboration with the rest of the organisation has worked and been developed

Course content

During the course, the student will carry out a delimited project at an organisation in the life-science industry that has a clear connection to biomedical research and development. The project is to have a clear issue that is summarised in the project plan. The student will, in addition to the workplace-based project period, devote time to analysing completed project work and summarise this in a written report that is also to be presented orally at a seminar. The student will also review and publicly discuss and examine other student's report.

Course design

The student, independently and in good time, contacts an organisation in the pharmaceutical industry or an equivalent organisation and writes a study plan together with a supervisor appointed by the organisation. The study plan is to describe the scope of the project work and intended tasks and is to be approved by course director or examiner before the student starts the project work. The student is to have a supervisor connected to the faculty and an appointed supervisor/works manager at the workplace. After the placement, the supervisor/works manager at the workplace is to enclose a certificate that describes what the student worked on during the course, make an assessment of how well the project period, the student is to actively participate in the work at the organisation. The project may, but does not need to be, based in a laboratory, but needs to be relevant for the organisation's research and/or development of products or services and have a clear connection to the subject of biomedicine. During the period of the project work, the student is also

to learn about the organisation and its role in product development. This may include the organisation's ownership, structure, annual report, business plan, which parts of drug development are carried out in the organisation, which professions work on what, and the organisation's short and long-term strategies for the project or projects in which the student has participated. The student presents their experiences and knowledge through a written and oral report at an open seminar before their fellow students, representatives from the organisation (if possible), and an examiner.

Assessment

The course is assessed through a course portfolio containing a project plan, introductory chapter to the subject area, written and oral presentation, discussion with expert critical review, public discussion and examination of another student's project and reflection on their own role in the implementation of the project. Furthermore, a completed placement is to be certified in writing by the supervisor at the organisation. The certificate is to clearly state completed duties and scope, and include and assessment of the student's efforts, both independently and in cooperation.

- 1. Course portfolio 30 credits (Fail/Pass/Pass with Distinction)
- 2. Written report 15 credits (Fail/Pass/Pass with Distinction)

If there are special reasons, other forms of assessment may apply.

The examiner, in consultation with Disability Support Services, may deviate from the regular form of examination in order to provide a permanently disabled student with a form of examination equivalent to that of a student without a disability.

Subcourses that are part of this course can be found in an appendix at the end of this document.

Grades

Marking scale: Fail, Pass, Pass with distinction.

To achieve the grade of Pass as a final grade, the grade of Pass is required on all components. To achieve the grade of Pass with Distinction as a final grade, the grade of Pass with Distinction is required on the course portfolio and written report.

Entry requirements

Passed examinations and course components in semester 1 of the Master's Programme (30 credits) and at least 15 credits from semester 2 and completion of BIMM03 (Innovation and Entrepreneurship) and BIMM04 (Drug Development and Clinical Trials).

Further information

Leads to a Master's Degree in Biomedicine with a *specialisation in industrial biomedical research (120 credits)* in which passed examinations and course components in BIMM01, BIMM02, BIMM03 and BIMM04 are to be included.

Subcourses in BIMM80, Biomedicine: Research Project in Life Science Industry

Applies from H21

2101 Course portfolio, 30,0 hp Grading scale: Fail, Pass, Pass with distinction
2102 Written report, 15,0 hp Grading scale: Fail, Pass, Pass with distinction